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ABSTRACT

This paper focuses on the identification and explanation of the attitudes of a sample of urban residents towards tourism development on Crete and their grouping with respect to these attitudes. Urban residents of Crete are quite strong in their support for tourism. However, the residents are not homogenous in their perceptions of tourism development. Education and employment in tourism were found to be the major single factors affecting the attitudes of residents of the island. A segmentation procedure based on attitude statements produced three clusters: the 'Advocates' (identified by their high appreciation of tourism benefits); the 'Socially and Environmentally Concerned' (characterised by a consensus towards the environmental and social costs from tourism expansion); and the 'Economic Sceptics' (who showed lower appreciation of tourism's economic benefits). The findings of the study are discussed with reference to the social exchange and the social representations theories and the conclusions of the study are provided.

Keywords: urban residents' perceptions and attitudes, single and multiple factors, social exchange theory, social representations, Crete.

INTRODUCTION

Residents of any host area may perceive tourism in a positive way because of its potential for job creation, income generation, and enhanced community infrastructure, as has been found in many host communities (for example, Saveriades 2000; Mitchell and Reid 2001; Andriotis 2002a). Alternatively, the residents of host areas may perceive tourism in a negative way because of the socio-cultural and environmental costs, as has also been found in many host communities (for example, Chen 2000; Liu, Sheldon, and Var 1987; Perdue, Long, and Allen 1990). More likely, residents will be aware of both the positive and negative implications of tourism and will draw their conclusions based on the relative weightings they attach to the benefits and the costs. Many commentators (for example, Allen et al. 1988; Lankford and Howard 1994; Ritchie 1988) have suggested that this balance of residents' perceptions of the costs and benefits of tourism is a major factor in visitor satisfaction and is, therefore, vital for the success of the tourism industry. Thus awareness of residents' perceptions of tourism development and its impacts can help planners and developers to identify real concerns and issues in order for appropriate policies and action to take place, optimising the benefits and minimising the problems.

Crete is a Greek island that has experienced significant levels and growth in tourism over the last 30 years. As a result tourism is now the largest economic activity of the island. In 1997, close to 2.5 million tourists visited the island, creating incomes of approximately 500 billion Greek Drachmas (HNT0 1998) and it has been estimated that approximately 40% of the local population are directly or indirectly involved in tourism activities (Anagnostopoulou et al. 1996; Region of Crete 1995). Tourism is expected to increase and to remain the island's largest foreign exchange earner (Andriotis 2002b; 2002c; Eurostat 1994)

building on the rapid growth of arrivals of international tourists: an increase of approximately 68% between 1990 and 1997 (HNT0 1998).

However, in spite of the above importance of tourism to the Crete, and the knowledge that the attitudes of residents are important in the success of tourism, little is known about the local community's perceptions of tourism. In reviewing the literature, only two studies were found to have examined the perceptions of Cretan residents in relation to tourism development (Kousis 1984 and Tsartas et al. 1995) and these studies dealt mainly with one aspect of tourism, the impacts of tourism on the society. In addition, residents of Crete have not been involved in the tourism development process (Andriotis 2001). For instance, the vast majority of residents of Kydonia, West Crete, believe that they are absent from the decision-making that affects their lives (Papaioannou, Serntedakis and Tsiolis 1998).

The importance of resident attitudes towards tourism and the lack of knowledge of the attitudes of residents of Crete have been identified above. This paper, therefore, seeks to add to the literature, and the understanding of tourism, by exploring the information collected during a research study that focused on the attitudes of Cretan residents towards tourism. It does this in five sections. These sections cover: past research and theories on the attitudes of residents of host communities towards tourism; the methodological approaches of studies that have measured community attitudes; the methodology of the study conducted on Crete; the results of the study; and the policy implications of the findings.

RESEARCH ON RESIDENTS ATTITUDES TO TOURISM DEVELOPMENT

The host communities' subjective perceptions of tourism are important because these perceptions affect the behaviour of residents towards tourists. This importance of the attitudes of residents is reflected in the large number of studies concerned with the impacts of tourism and tourism development on host communities. For instance, the authors of this paper have found 83 quantitative published papers in academic journals related to this area of research.

In an attempt to measure perceptions and attitudes, several multi-attribute models have been proposed, mainly in the consumer behaviour field (Um and Crompton 1990). However, although it has been proven that attitudes can be utilized as a useful predictor of preferences, there is not enough evidence to support their utility in predicting behaviour (Assael 1984), in the host resident-tourism context. One frequently used model of attitudes is the CAC model which conceptualises attitudes into the cognitive, the affective and the conative components. This conceptualisation has a long history (for example, Boulding, 1956 and Krech and Crutchfield 1948) and has been used in tourism research by, for example Vaughan and Edwards (1999, p. 3) amongst many others. The cognitive component is concerned with how residents would describe the impact of tourism on the physical attributes or features of the area they live, such as the landscape, the built environment and people. The affective component focuses on the interpretation of the cognitive perceptions by the individual into feelings of like or dislike. The conative component relates to the action/reaction of the individual. However, the main point of concern in the context of residents' attitudes, is that what is perceived does not have to be true, it simply has to be thought to be true. Perceptions can only be inferred and cannot be directly ascertained (Ap 1992, p. 671). Perceptions rather than reality are what motivate residents to act or not to act in a certain way.

Various authors (for example, Ap 1992; Bystrzanowski 1989; Pearce 1989) have discussed the use of theories in investigating residents' attitudes towards tourism development. These theories include: play theory, compensation theory, conflict theory and

dependency theory. However, it is not yet proven that any of these theories can provide an appropriate framework for explaining community attitudes towards tourism. As a result, various authors (for example, Ap 1990, 1992; Faulkner and Tideswell 1997; Husbands 1989) have identified, as a major problem in understanding the nature of residents' perceptions of tourism development, the absence of a comprehensive theoretical explanation.

In the tourism literature two frameworks have dominated in community attitudinal research, social exchange theory and social representations theory.

Social exchange theory

Over the last decade social exchange theory has attracted the attention of an increasing number of researchers (Ap 1990; 1992; Gursoy, Jurowski, and Uysal 2002; Jurowski, Uysal, and Williams 1997; Madrigal 1993; Perdue, Long, and Allen 1990). Social exchange theory is concerned with “understanding the exchange of resources between individual and groups in an interaction of situation” where “actors supply one another with valued resources” (Ap 1992, p. 668). Social exchange theory specifies the exchange of tangible or intangible resources that residents and tourists may give and receive in the host-resident tourism context. As a result, the starting point for social exchange comes from the need to reciprocate for benefits received in order to continue receiving them (Moore and Cunningham 1999, p. 106). Residents are willing to enter into exchange with tourists if they receive more benefits than costs (Blau 1964; Jurowski, Uysal, and Williams 1997). Residents who found the exchange beneficial for their well-being are keen to support tourism development and have positive reactions to tourists. Residents who view the exchange as problematic will oppose tourism development.

Three main elements of the exchange process can be identified: economic, environmental and socio-cultural. From the economic point of view social exchange theory may be associated with growth machine theory which suggests that residents who can profit economically from tourism, mainly the local land owners and investors, are more favourably disposed towards tourists and further tourism growth (for example, Madrigal 1995; Martin 1996). On the other hand, there are some researchers who suggest that residents give higher priority to environmental factors than economic benefits (for example, Liu and Var 1986). Finally, although employment generation through tourism is among the first priorities for local residents, residents also see tourism as a means of helping them learn more about their local culture and preserving traditional folklore (Besgulides, Lee and McCormick 2002). The way that residents perceive the economic, socio-cultural and environmental elements of exchange affects the manner in which they react to tourism, and that includes the conative element of perceptions.

Social representation

The development of individual attitudes and perceptions towards tourism may successfully be studied by examining the social representations. Therefore, Pearce, Moscardo, and Ross (1996) suggest that social representations are particularly valuable for explaining social conflict or reactions to salient issues within a community. In particular, social representations are a means of constructing and understanding social reality (Meier and Kirchler 1998, p. 757). Drawing on the work of Moscovici (1981) social representations can be defined as myths, knowledges, images, ideas, and thoughts about a ‘social object’ or, in other words, a matter of social interest such as tourism. As stated by Fredline and Faulkner (2000) “representations are the mechanisms people use to try and understand objects and events in the world around them. They tend to turn the unfamiliar into the familiar, as objects and events are recognized on the basis of past experiences, and prior knowledge serves as the reference point of new encounters” (p. 767). As Pearce, Moscardo, and Ross (1996) state:

Social representations theory is concerned with describing and understanding how and what people think in their ongoing everyday experiences and how a wider social reality influences these thoughts. They can be seen as metasystems which include values, benefits and common-sense explanations of how the world operates. Social representations can also be seen as incorporating the stock of common knowledge (p. 39).

Overall, communities can be considered as social groupings that exhibit active social engagement. Moscovici (1984) argues that social representations may be linked to specific social groups. Representations are shared by groups of people within a society although not all groups are uniformly cohesive (Fredline and Faulkner 2000, p. 767). As a result, there is a need to identify community groups, in the attempt to understand their perceptions and influence their reactions. However, the identification of community groups, and the consensus held by each group, is fraught with difficulty (Potter and Wetherell 1987; Halfacree 1995) and therefore social representations are criticised as vague and boundary-less.

METHODOLOGICAL APPROACHES TO MEASURING COMMUNITY ATTITUDES

Within the extensive quantitative research on community attitudes there are two different methodological approaches. First, there are empirical studies applying statistical techniques without actually providing theory. Second, there are studies that apart from measuring attitudes also test and develop theory. Possibly due to the difficulties in developing and testing theories, studies using the first approach are more frequent than those using the second.

Quantitative methods adopted in attitudinal research can be also distinguished according to the statistical techniques they use: bivariate, multivariate and the ones that utilise both bivariate and multivariate methods. Bivariate techniques investigate the influence of single factors and multivariate techniques investigate the influence of two or more factors. The use of both techniques may allow a deeper understanding of why people hold the opinions they do.

Single factors

The single factors are usually examined through the extrinsic and intrinsic dichotomy. Figure 1 summarizes the extrinsic and intrinsic dichotomy as identified and tested by various researchers.

Figure 1: Single Factors Identified and Tested by Various Researchers as Explanations of Residents' Attitude toward Tourism.

Factors	Studies
<i>Extrinsic</i>	
Degree or stage of the host destination's development	Allen et al. (1988); Dogan (1989); Doxey (1975); Duffield and Long (1981); Gilbert and Clark (1997); Johnson, Snepenger, and Akis (1994); Madrigal (1993); Ritchie (1998); Yoon, Chen, and Gursoy (1999).
Type of tourists	Butler (1975); Dogan (1989).
Seasonality	Belisle and Hoy (1980); Rothman (1978); Sheldon and Var (1984).
<i>Intrinsic</i>	
Distance that residents live from tourist zones	Belisle and Hoy (1980); Long, Perdue, and Allen (1990); Pearce (1980); Sheldon and Var (1984); Tyrrell and Spaulding (1984).
Involvement in tourism	Ap (1992); Brougham and Butler (1981); Pizam, Milman, and King (1994).
Economic and/or employment dependency in tourism	Ap (1990); Brougham and Butler (1981); Caneday and Zeiger (1991); Haralambopoulos and Pizam (1996); Korca (1998); Lankford (1994); Liu and Var (1986); Madrigal (1995); Milman and Pizam (1988); Murphy (1981); (1983); Pizam (1978); Pizam and Pokela (1985); Rothman (1978); Sheldon and Var (1984); Snaith and Haley (1994); (1999); Thomason, Crompton, and Kamp (1979); Tyrrell and Spaulding (1984); Um and Crompton (1987).
Length of residency	Allen et al. (1988); Brougham and Butler (1981); Lankford (1994); Liu and Var (1986); Madrigal (1993); (1995); Pizam (1978); Ross (1992); Sheldon and Var (1984); Snaith and Haley (1999); Yoon, Chen, and Gursoy (1999).
Socio-demographic characteristics	
Gender	Chen (2000); Milman and Pizam (1988); Pizam and Pokela (1985); Ritchie (1988).
Age	Brougham and Butler (1981); Chen (2000); Fredline and Faulkner (2000); Haralambopoulos and Pizam (1996); Ritchie (1988).
Education	Caneday and Zeiger (1991); Haralambopoulos and Pizam (1996); Hsu (1998); Husbands (1989); Kim (1986).
Income	Lankford (1991); Haralambopoulos and Pizam (1996).

The extrinsic dimension

According to Fredline and Faulkner (2000, p. 765) the extrinsic dimension refers to variables affecting residents' reactions at the macro level and consequently they have a common impact on a community as a whole.

Among the major extrinsic factors found in the literature to be associated with community attitudes is the degree or stage of the host destination's development. Therefore, stages or step models are popular in the investigation of community perceptions. Butler (1980) in his life-cycle model has identified five stages of tourism evolution at a destination (exploration, involvement, development, consolidation, stagnation and decline or rejuvenation). These stages are often linked to Doxey's (1975) 'Irridex' model suggesting that the attitudes of the residents of host communities towards tourism pass through a predictable sequence of reactions (from euphoria to apathy to annoyance to antagonism) as a community moves from the early stages of tourism development to full tourism development. To measure change over time in residents' attitudes, longitudinal studies on residents' reactions have been

undertaken (e.g. Getz 1986; 1994; Johnson, Snepenger, and Akis 1994; Soutar and McLeod 1993), although such studies have so far constituted something of a rarity in the literature.

The type of tourist is among the extrinsic factors influencing residents' attitudes towards tourism impacts. As Faulkner and Tideswell (1997) report "the degree to which the host and visitor populations vary from each other in terms of racial characteristics, cultural background and socio-economic status will have a significant bearing on local reactions" (p. 7). Cohen (1972) and Smith (1978) examined tourism growth focusing on traveler characteristics. Both authors suggested that independent travelers and explorers, are more likely to directly experience local culture and lifestyles, and impact less on the community, compared to package tourists. Therefore, the non-institutionalised types of tourist may be perceived to be more beneficial for the local community.

The final extrinsic factor is seasonality. The seasonal fluctuations in demand are often cited as the main reason for negative and or positive attitudes towards tourism impacts. In particular, during the low season period, residents may have a more positive approach to tourism.

In summary, none of the extrinsic factors is tested in the study reported on in this paper because the research dealt with the perceptions of the impacts of tourism over a single period of time. In addition, the island attracts mainly one type of tourist: the mass market. For instance, Horwarth (1994) found that in 1993, 85% of tourists to Crete were organised through tour operators. As a result, any comparison of Cretan residents attitudes towards different types of tourist would be vague, due to the fact that residents may not be aware of other types of tourist other than the mass market.

The intrinsic dimension

The intrinsic dimension suggests that the community is heterogeneous and therefore residents' perceptions may vary according to their characteristics (Faulkner and Tideswell 1997). Intrinsic factors that have been tested by various researchers include the distance that residents live from tourist zones, and/or the length of residence. As some studies found, both of them are capable of explaining attitudes. In addition, as has been previously suggested by social exchange theory, the positive attitudes of residents are, very often, due to their economic and/or employment dependency on tourism. Only a few of the published studies have found that the intrinsic factors of gender, age, education and income explain the variations in attitudes toward tourism. The majority of the socio-demographic studies (for example, Allen et al. 1993; Belisle and Hoy 1980; Brayley and Var 1989; Brown and Giles 1994; Davis, Allen, and Cosenza 1988; Liu and Var, 1986; Madrigal 1993; 1995; Mok, Slater, and Cheung 1991; Pizam 1978; Ryan, Scotland, and Montgomery 1998) have found that socio-demographic characteristics appear to have little or no significance in explaining the perceptions of residents of tourist areas.

The study reported on in this paper examined all the intrinsic factors identified in the literature with exception of the distance that residents live from the tourist zone. The reason for this is the difficulty in identifying the tourist zone for the cities used in the sample.

Multiple factors

The attitudes of residents of tourist areas have also been investigated using multiple factor approaches which, unlike the single factor approaches, examine more than one variable simultaneously. Multiple factor studies acknowledge that the attitudes of residents are made up of both positive and negative perceptions of the economic, social and environmental implications of tourism development. In the tourism literature there are two main techniques of examining community attitudes using multiple factors: factor analysis and cluster analysis. Figure 2 presents attitudinal studies that have used either cluster of

factor analysis. Specifically, among 28 studies, that used multivariate statistics, the majority (71.4% or 20 studies) have used factor analysis.

Figure 2: Multiple Factors

Multivariate technique used	Studies
Factor analysis	Andereck and Vogt (2000); Belisle and Hoy (1980); Faulkner and Tideswell (1997); Harvey, Hunt, and Harris (1995); Hsu (1998); (2000); Lankford and Howard (1994); Liu, Sheldon, and Var (1987); Korca (1998); Madrigal (1993); McCool and Martin (1994); Perdue, Long, and Allen (1990); Perdue, Long, and Kang (1995); Ryan and Montgomery (1994); Yoon, Chen, and Gursoy (1999); Chen (2000); Tomljenovic and Faulkner (2000); Tosun (2002).
Cluster analysis	Davis, Allen, and Cosenza (1988); Evans (1993); Fredline and Faulkner (2000); Madrigal (1995); Ryan and Montgomery (1994); Ryan, Scotland, and Montgomery (1998); Weaver and Lawton (2001); Williams and Lawson (2001).

Factor analysis

The primary purpose of factor analysis is to examine inter-relationships among a large number of (metric) variables. It does this by condensing them into a smaller set of components (factors) with a minimum loss of information (Diamantopoulos and Schlegelmilch, 1997; Hair, Anderson, and Tatham 1987, p. 6) in order to discover underlying patterns without sacrificing the data's original integrity. Each factor contains "variables correlated with one another, but largely independent of other variables or subsets" (Tabachnick and Fidell, 1989, p. 597).

Cluster analysis



The non-homogeneity of group attitudes within communities, suggested by social representation theory, suggests that representations are shared by various societal groups as a result of the consensus of community perceptions. Therefore there are studies that have used cluster analysis in the attempt to classify people according to the extent to which their overall perceptions are positive or negative, whilst accepting that those overall attitudes are made up of negative and positive perceptions of different intensity. For example, according to Madrigal (1995):

Residents are forced to take some kind of position on development. Residents who share perceptions may be considered part of the same nested community, whereas residents with competing views of development belong to different nested communities. Membership does not necessarily have to be formally stated; rather membership in this context refers only to those individuals whose reactions to decisions lead to similar perceptions of outcomes (pp. 87-88).

As a result, segmentation of residents based on the attitudes held have resulted in the finding that any host community is not homogenous but comprises a number of groupings of like-minded individuals.

Figure 3 presents information about the findings of the studies that have used cluster analysis as a means of explaining community attitudes. These findings reflect that there is a continuum of segments according to the degree of positivity in their attitudes: ranging from advocates to haters, although the number of groupings along this continuum varies from study to study. However, it is evident that more than half of the respondents in the studies (ranging from 100% to 55%) held positive attitudes towards tourism. Exceptions include the studies of Ryan and Montgomery (1994) and Weaver and Lawton (2001), where slightly more than half of respondents held neutral views.

Figure 3: Multi-factor Studies and Degree of Positivity towards Tourism Development

Degree of Positivity	Davis et al. (1988)	Evans (1993)	Ryan and Montgomery (1994)	Madrigal (1995)	Ryan et al. (1998)	Fredline and Faulkner (2000)	Weaver and Lawton (2001)	Williams and Lawson (2001)
High 	Lovers (20%)	Lovers (20%)	Enthusiast (22.2%)	Lovers (13%)	Extreme Enthusiastics (17.5%)	Lovers (23%)	Supporters (27%)	Lovers (44%)
	Love 'Em for a Reason (26%)	Selfish (3%)			Moderate Enthusiastics (42.5%)	Ambivalent Supporters (29%)		Taxpayers (25%)
	Cautious Romantics (21%)	Controlled (32%)		Realistics (56%)	Cautious Supporters (40%)	Realistics (24%)		
	In-Betweeners (18%)		Middle of the Roaders (54.3%)				Neutrals (51%)	
			Somewhat Irritated (24.2%)			Concerned for a Reason (9%)		Innocents (20%)
Low 	Haters (16%)	Haters (11%)		Haters (31%)		Haters (15%)	Opponents (22%)	Cynics (10%)

As noted earlier, although there are many studies based on multiple factors, the vast majority preferred factor analysis. This is perhaps due to the ease of the interpretation of the results of such a method compared to cluster analysis. In cluster analysis the researcher has to use his/her subjective opinion to identify the number of clusters and to interpret the results. As a result, the current paper is different in that it presents the results of a cluster analysis of urban Cretan residents. The findings of the factor analysis are presented elsewhere (Andriotis 2000).

METHODOLOGY

Overall Approach

This paper reports on part of a case study of community perceptions of tourism development in Crete that was undertaken during the summer of 1997. The community groups incorporated in the case study included residents, tourism business people and local authority officials. The results in this paper are based on the survey of residents.

Sampling

The sampling frame was based on the four major cities of the northern coast of Crete: Heraklio, Chania, Rethymno and Agios Nikolaos. As a result, the chosen sample refers to the population of urban residents and not to all residents of the island. Therefore, the results are presented in the context of this population and should not be generalised to the population of the island as a whole.

The four cities used in the sample were selected because they exhibit extensive tourism development. Specifically, the city of Heraklio is the largest city of the island. It attracts mainly day-trippers and a few businessmen, although nearby are some of the largest resorts of the island. Although the city has a diversified economy many of its residents work during the summer season at the hotels and tourism businesses in coastal resorts located in the vicinity of the city. The cities of Chania and Rethymno are the second and third largest cities of the island respectively, both of them famous for their old towns and their Venetian harbours. They attract day trippers, visitors for short stays and a smaller number of businessmen, although many resort hotels are found in their urban-rural fringe, which is defined by Weaver and Lawton (2001, p. 439) as the area extending from the edge of a city's contiguous urban development to the outer edge of vehicular commuter belt. Finally, the city of Agios Nikolaos is the smallest among the cities. It has been developed from a small fishing village to a mass tourist developed summer resort. The city attracts, almost entirely, package tourists looking for the 3S (sun, sea and sand) offerings.

Four areas within each city were randomly selected using a process that took account of the different sizes of polling districts within each city as defined by the number of electors. A random starting point was selected in each polling district. Each fifth property (in total 25 in each district), on one side only of each street was incorporated into the sampling frame. One individual per dwelling was asked to participate in the interview.

400 households were contacted within the four cities: 100 per each of the four cities. A 48.5% response rate, 194 respondents, was achieved, using face-to-face interviews based on a questionnaire.

Questionnaire design

The questionnaire was prepared following a review of existing literature dealing with residents' perceptions of tourism development (for example, Akis, Peristianis, and Warner 1996; Johnson, Snepenger, and Akis 1994; Long, Perdue, and Allen 1990; Madrigal 1995; McCool and Martin 1994; Pizam 1978), and tourism development issues that were identified

by past research (e.g. Kousis 1984; Tsartas et al. 1995) as important for the residents of the island.

The questionnaire consisted of 44 questions. However, this paper is based on the answers to 7 socio-demographic and 27 Likert Scale questions. The socio-demographic characteristics of respondents are shown in Table 1. Attempts to test the representativeness of the sample were unsuccessful, because of lack of official data for the areas from which the samples were drawn.

Table 1: Socio-demographic Characteristics of the Sample

	N	Sample %
<u>City:</u>		
Heraklio	55	28
Chania	50	26
Rethymno`	50	26
Agios Nikolaos	39	20
<u>Length of Residence:</u>		
All life residents	141	73
New-comers	53	27
<u>Gender:</u>		
Male	114	59
Female	80	41
<u>Age:</u>		
18-30 years	70	36
31-44 years	60	32
45+ years	60	32
<u>Education:</u>		
Less-educated (>12 years education)	43	22
Medium-educated (12 years education)	81	42
Highly-educated (13 years + education)	70	36
<u>Employment reliance:</u>		
Non-reliant	87	45
Reliant	106	55
<u>Income:</u>		
Less than 3,000,000 Greek Drachmas	103	53
Over 3,000,000 Greek Drachmas	91	47

The Likert Scale questions were based on statements to which respondents were asked to respond in terms of a five-point scale which represented a continuum from very positive to very negative. Seven statements used in the analysis were designed to assess residents' perceptions of the social impacts of tourism. 13 statements dealt with the economic implications of tourism development. 5 statements dealt with the environmental impacts of development. 2 statements focused on the overall impacts. The classification of questions into the four categories (i.e. social, economic, environmental and overall) emerged by the identification of the main issues found by past research dealing with residents' attitudes and opinions of tourism development. To ensure validity of the survey instrument experts were asked to judge if the instrument covered the range that they would expect, a review of the literature was undertaken to identify different aspects of the concepts under investigation, and a pre-test, in other words, the pilot survey, to check a proper and broad flow of questioning.

Analytical Procedure

A number of statistical procedures were carried out for this paper using the Statistical Package for the Social Sciences (SPSS, version 8.0).

First, before any other statistical analyses were performed, univariate statistics were calculated for all survey items.

Second, seven socio-demographic factors (education, dependence on tourism employment, city of residence, gender, length of residence, age and income) were used as independent variables and the 27 Likert Scale statements as the dependent variables. One-way ANOVA and T-tests were used to identify differences between the seven independent variables in respect of the dependent variables. T-tests were applied when the independent variable was divided into two sub-groups. When the independent variable was divided into three or more sub-groups ANOVA tests were applied. (The T and F ratios produced by these procedures are not cited in the text because they do not provide any explanatory value to the reader.)

Third, to divide the sample into meaningful sub-groups, cluster analysis was carried out. The K-means cluster procedure was used, instead of hierarchical fusion, because it was more appropriate for the sample size. In a K-means analysis the number of clusters is chosen by the researcher and cases are grouped into the cluster with the closest centre (SPSS 1997). To test the validity of the data, the Kaiser-Meyer-Olkin test of sampling adequacy was used. The result of the test was a value of .721, which was high enough to allow cluster analysis, and indicated that both the number of variables and the sample size were appropriate. Finally, to test the reliability of the scale Cronbach α was calculated. The value of Cronbach α was .6008, showing satisfactory internal consistency reliability of the scale, since Malhotra (1996) suggests that values greater than .6 can ensure internal consistency reliability of a scale.

Once clusters were identified, their key characteristics were examined and they were named by comparing the mean scores of the responses and the ratings on the Likert Scale for each question. In order to pinpoint the differences in data composition among the clusters, ANOVA tests were carried out. The ANOVA tests showed significance for the 22 out of the 27 items. However, the F-tests should be used only for descriptive purposes and not to test the hypothesis that the cluster means are equal because the clusters have been chosen to maximise the differences among cases in different clusters (SPSS 1997). It should be noted that the three clusters reported on in this paper accounted for 172 of the 194 respondents. Not all the responses were used in the cluster analysis because the cluster analysis statistical procedure cannot handle missing data for the selected variables.

The level of probability for rejecting the null hypothesis that the independent and dependent variables were not related was .05 for all tests.

RESULTS

Overall perceptions of tourism development

Table 2 presents the results in relation to the responses to the 27 attitudinal statements. For statements 4, 5, 8, 9, 10, 11, and 25 the Likert Scale ranged from 1 (very advantageous) to 5 (very disadvantageous) and for the remainder from 1 (strongly agree) to 5 (strongly disagree). Where negative statements were used the results were reversed during the analysis. This means that, with a mid-point of 3, all positive views lie between 1 to 3 and all the negative views between 3 and 5. An examination of the data in Table 2 will reveal that generally the residents in the sample held positive views of tourism development.

Table 2: Overall Responses to Tourism Statements*

	1**	2**	3**	4**	5**	Mean	Std. Deviation
	%	%	%	%	%		
I. SOCIAL IMPACTS							
1. Tourism encourages a variety of cultural activities by the local population (e.g. crafts, arts, music)	16	69	8	5	2	2.08	.77
2. Tourism has led to an increase of infrastructure for local people	15	67	9	9		2.14	.78
3. The money that tourism brings in is of benefit to the whole community	13	57	12	18		2.36	.92
4. How advantageous are the impacts of tourism on your family?	13	34	49	4		2.45	.76
5. How advantageous are the impacts of tourism on the social life?	10	43	21	23	2	2.64	1.02
6. Our household standard of living is higher because of the money that tourists spend here	11	28	31	28	3	2.84	1.04
7. Tourism gives benefits to a small group of people in the region	4	27	14	52	4	3.24	1.01
II. ECONOMIC IMPACTS							
8. How advantageous are the impacts of tourism on the Cretan economy?	51	48	***	***	***	1.52	.60
9. How advantageous are the impacts of tourism on Greek government's income?	50	49	1		***	1.53	.58
10. How advantageous are the impacts of tourism on employment?	48	50	1	***	1	1.58	.65
11. How advantageous are the impacts of tourism on the region's economy?	41	54	4	2	***	1.68	.67
12. Tourism attracts more spending in the region	30	66	3	***	***	1.75	.58
13. Tourism attracts more investment in the region	24	65	8	3		1.89	.64
14. There should be no government incentives for tourism development	27	58	7	7	1	1.96	.84
15. Prices of many goods and services in the region have increased because of tourism	30	52	10	7	***	1.96	.86
16. Non-residents should be allowed to develop tourism attractions in this area	7	45	18	26	5	2.76	1.06
17. Most of the money earned from tourism ends up going to out of the region companies	5	27	37	31	***	2.95	1.04
18. Non-Cretan owned businesses are beneficial for the region's tourist industry	4	29	19	41	8	3.19	1.07
19. There should be a specific tax on tourists	6	26	19	42	7	3.19	1.08
20. Tourism creates more jobs for foreigners than for local people in the region	4	22	21	53	***	3.24	.93
III. ENVIRONMENTAL IMPACTS							
21. This community should control tourism development	27	67	3	3		1.81	.61
22. Tourism provides an incentive for the restoration of historical buildings	17	75	4	4	***	1.96	.63
23. The construction of hotels and other tourist facilities has destroyed the natural environment in the region	13	43	20	24	***	2.57	1.01
24. Tourism provides an incentive for the conservation of natural resources	10	43	14	28	5	2.74	1.13
25. How advantageous are the impacts of tourism on the environment?	5	25	19	41	10	3.26	1.10
IV. OVERALL IMPACTS							
26. Overall, the benefits of tourism are greater than the costs to the people of the area	11	62	14	14		2.29	.83
27. Overall, the benefits of tourism are greater than the costs to Crete as a whole	8	67	14	11		2.29	.77

* Percentages (rows) do not always total 100% due to rounding

** For statements 4, 5, 8, 10, 11, and 25 the Likert Scale ranged from 1 (very advantageous) to 5 (very disadvantageous) and for the remainder from 1 (strongly agree) to 5 (strongly disagree)

*** Less than 1%.

Single factors

In the results of the ANOVA and T-tests not many statistical differences were evident since respondents displayed a quite high degree of similarity in their choices. However, among the seven socio-demographic variables, education and employment reliance on tourism were the two best discriminators of attitudes towards tourism development. Education was a discriminator for nine of the statements. The results of the ANOVA tests (Table 3) indicate that the more highly educated residents were less favourable towards the impacts of tourism than the medium and less well educated.

Table 3: Mean Scores and ANOVA Tests for Education

		MEANS			F	df ²	Sig.
		L ¹	M ¹	H ¹	RATIO	WITHIN GROUPS	
I.	SOCIAL IMPACTS						
1.	Tourism gives benefits to a small group of people in the region	3.07	3.12	3.49	3.358	189	.037
II.	ECONOMIC IMPACTS						
2.	How advantageous are the impacts of tourism on the Cretan economy?	1.78	1.42	1.49	5.259	188	.006
3.	How advantageous are the impacts of tourism on the region's economy?	1.88	1.67	1.56	3.254	191	.041
4.	Tourism attracts more spending in the region	1.86	1.81	1.61	3.388	189	.036
5.	Prices of many goods and services in the region have increased because of tourism	2.05	2.11	1.72	4.197	190	.016
6.	Tourism creates more jobs for foreigners than for local people in the region	2.90	3.21	3.49	5.473	190	.005
III.	ENVIRONMENTAL IMPACTS						
7.	The construction of hotels and other tourist facilities has destroyed the natural environment in the region	2.70	2.73	2.31	3.752	189	.025
8.	Tourism provides an incentive for the conservation of natural resources	2.28	2.61	3.19	10.527	189	.000
9.	How advantageous are the impacts of tourism on the environment?	2.69	3.22	3.66	11.275	190	.000

¹ L = Low-educated, M = Medium-educated, H = Highly-educated

² df between groups = 2.

Reliance on tourism employment was also important as a discriminator of attitudes towards tourism development for eight of the statements. Table 4 indicates the statements where respondents who were reliant on tourism for employment expressed more favourable perceptions.

Table 4: Mean Scores and ANOVA Tests for Reliance on Tourism Employment

Items		MEANS		T	df	Sig.
		NR ¹	R ¹			
I. SOCIAL IMPACTS						
1.	The money that tourism brings in is of benefit to the whole community	2.56	2.20	2.686	174	.008
2.	How advantageous are the impacts of tourism on your family?	2.77	2.55	3.368	189	.001
3.	Our household standard of living is higher because of the money that tourists spend here	3.12	2.62	3.334	190	.001
II. ECONOMIC IMPACTS						
4.	How advantageous are the impacts of tourism on the Cretan economy?	1.67	1.40	3.184	188	.002
5.	How advantageous are the impacts of tourism on Greek government's income?	1.68	1.41	3.312	186	.001
6.	How advantageous are the impacts of tourism on employment?	1.71	1.47	2.649	190	.009
7.	How advantageous are the impacts of tourism on the region's economy?	1.83	1.56	2.849	191	.005
8.	Tourism attracts more investment in the region	2.05	1.76	3.111	191	.002

¹ NR = Non-reliant, R = Reliant

Finally, for the remaining five independent variables (city, length of residence, gender, age and income) not many significant differences were found in respect of perceptions.

Multiple factors

The clustering procedure was based upon the mean average scores of the 27 statements. This procedure resulted in three clusters as given in Table 5.

Table 5: Mean Scores of Clusters

Items	CLUSTERS MEANS			F	SIG. ²
	1	2	3	RATIO ¹	
I. SOCIAL IMPACTS					
1. Tourism has led to an increase of infrastructure for local people	1.82	2.54	1.97	20.363	.000
2. Tourism encourages a variety of cultural activities by the local population (e.g. crafts, arts, music)	1.85	2.38	2.00	10.426	.000
3. The money that tourism brings in is of benefit to the whole community	2.05	2.66	2.65	9.887	.000
4. How advantageous are the impacts of tourism on the social life?	2.12	3.03	3.00	20.734	.000
5. How advantageous are the impacts of tourism on your family?	2.21	2.68	2.55	7.612	.001
6. Our household standard of living is higher because of the money that tourists spend here	2.44	3.34	3.00	15.748	.000
7. Tourism gives benefits to a small group of people in the region	3.62	3.22	2.32	21.721	.000
II. ECONOMIC IMPACTS					
8. How advantageous are the impacts of tourism on the Cretan economy?	1.38	1.53	1.90	8.730	.000
9. How advantageous are the impacts of tourism on Greek government's income?	1.38	1.54	1.87	8.163	.000
10. How advantageous are the impacts of tourism on employment?	1.42	1.57	2.03	10.119	.000
11. How advantageous are the impacts of tourism on your regions economy?	1.51	1.71	2.13	10.200	.000
12. Tourism attracts more spending in the region	1.68	1.82	1.77	.986	.375
13. Tourism attracts more investment in the region	1.75	2.10	1.81	5.880	.003
14. There should be no government incentives for tourism development	1.85	2.03	2.29	3.007	.052
15. Prices of many goods and services in the region have increased because of tourism	2.08	1.96	1.71	2.120	.123
16. Non-residents should be allowed to develop tourism attractions in this area	2.63	3.24	2.10	17.016	.000
17. Non-Cretan owned businesses are beneficial for the region's tourist industry	2.95	3.68	2.81	12.745	.000
18. Most of the money earned from tourism ends up going to out of the region companies	3.12	2.91	2.45	6.746	.002
19. Tourism creates more jobs for foreigners than for local people in the region	3.58	3.46	2.03	51.040	.000
20. There should be a specific tax on tourists	3.73	3.01	2.16	32.778	.000
III. ENVIRONMENTAL IMPACTS					
21. Tourism provides an incentive for the restoration of historical buildings	1.85	2.06	1.94	1.747	.178
22. This community should control tourism development	1.93	1.75	1.81	1.573	.211
23. Tourism provides an incentive for the conservation of natural resources	2.27	3.60	2.06	49.806	.000
24. How advantageous are the impacts of tourism on the environment?	2.67	3.82	3.10	23.913	.000
25. The construction of hotels and other tourist facilities has destroyed the natural environment in the region	3.27	1.99	2.26	47.329	.000
IV. OVERALL IMPACTS					
26. Overall, the benefits of tourism are greater than the costs to the people of the area	1.92	2.53	2.68	16.555	.000
27. Overall, the benefits of tourism are greater than the costs to Crete as a whole	1.95	2.62	2.39	16.138	.000

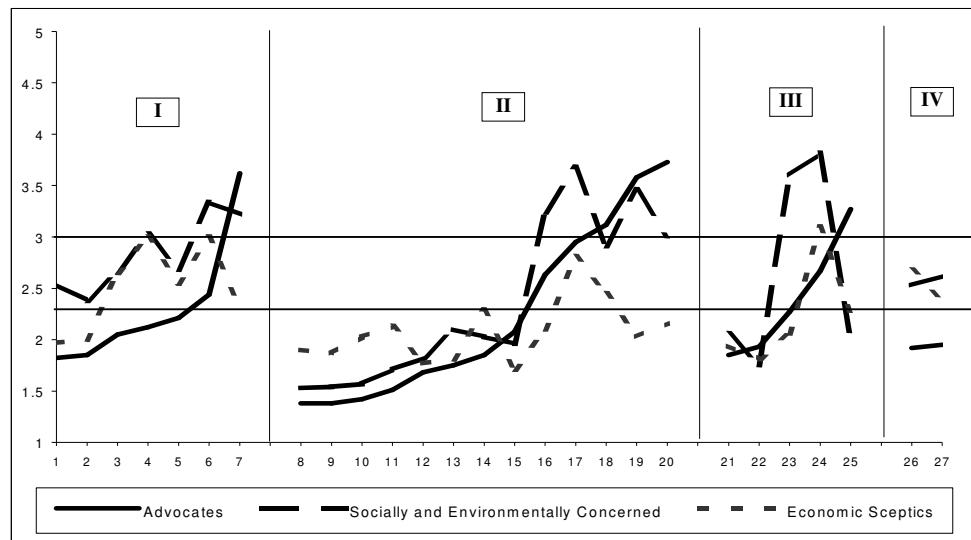
¹ df between groups = 2, within groups = 169

² The values shown in bold indicate a statistically relationship at the .05 level of confidence

Figure 4 is based on Table 5 and illustrates diagrammatically the mean scores of each cluster. The numbers on the horizontal axis are the statement numbers. The Figure is divided into sections that correspond to the social (I), economic (II), environmental (III) and overall (IV) impacts of tourism development. There is a 'corridor of uncertainty' between 2.5 and 3.5. The results within this 'corridor' are likely to be difficult to interpret for two reasons. First, respondents may tend not to want to provide answers at the extreme ends of the scales. Secondly, there may be polarized views that would result in a mid-range average, although this was not the case in these results.

A description of each cluster follows.

Figure 4: Mean Scores of Clusters



Cluster 1: Advocates

The first cluster represents the largest segment of the sample, comprising 42% of the total (N=73). This group strongly supports tourism and therefore it was labelled ‘*Advocates*’.

The ‘*Advocates*’ expressed the most favourable opinions for the six statements dealing with the positive social impacts of tourism and were more likely to express disagreement, compared to the other clusters, to the statement that tourism gives benefits to a small group of people in the area (74% disagreed or strongly disagreed). The families of ‘*Advocates*’ are mostly affected by tourism development. Sixty-two percent declared as advantageous the impacts of tourism to their family: something that might explain their strong support towards tourism development.

‘*Advocates*’ were very aware of tourism’s beneficial impacts on the economy of their region and on the Crete as a whole, on employment, and on government revenues (with 99% considering tourism as advantageous) and agreed that tourism attracts more investment in their region (97% agreed). As a result, it is clear that there is a widespread perception among this cluster that tourism is a definite economic asset for the island’s welfare. Their support of the tourism industry is evident in the 73% who rejected the establishment of a specific tax on tourists, and the 92% who supported the proposal that the government should provide incentives for the tourism development of the island.

The ‘*Advocates*’ did not express much concern for the environmental impacts of tourism. Specifically, 48% disagreed and 33% responded neutrally (suggesting that they are open-minded) to the statement: “the construction of hotels and other tourist facilities has destroyed the natural environment”. Fifty-one percent perceived tourism as being advantageous to the environment. 96% praised tourism because it provides an incentive for the restoration of historical buildings.

On the statements dealing with the overall benefits of tourism, the ‘*Advocates*’ were more likely to agree (90% gave a score above the mid-point of 3) than those in the other clusters.

In general, the ‘*Advocates*’ are notable for their recognition of the significance of the tourism industry for Crete and, when considering statements related to the negative effects of tourism, they were more likely to show disagreement than the other two groups.

Cluster 2: Socially and Environmentally Concerned (SEC)

The second cluster represents 40% of the sample (N=68). This cluster is characterised by the most negative views of the social and environmental impacts of tourism, and therefore it was labelled '*SEC*'.

Specifically, the '*SEC*' were the most negative for all the statements dealing with the social impacts of tourism, with exception the statement "tourism gives benefits to a small group of people", where their responses were more evenly distributed across the scale (49% disagreed and 29% agreed).

The '*SEC*' are in-between cluster one and cluster three for most of the economic impact statements, with the exception of the following statements where they were the most negative: "non-Cretan owned businesses are beneficial for the region's tourist industry" (69% disagreed) and "non-residents should be allowed to develop tourism attractions in this area" (half of them disagreed and 18% were in the middle of the scale). This can be associated with the notion that the attraction of outsiders into the island's tourism industry may burden further the environmental resources.

The '*SEC*' had the highest consensus among the groups towards the environmental costs resulting from tourism development. In particular, they were the most negative (68% disagreed) in respect of the statement "tourism provides an incentive for the conservation of natural resources" and they were more likely to agree (87% agreed) with the statement that "the construction of hotels and other tourist facilities has destroyed the natural environment". Similarly, 78% considered the impacts of tourism on the environment disadvantageous.

Finally, the '*SEC*' did not show much agreement with the statements that the overall benefits of tourism were more than the costs.

Cluster 3: Economic Sceptics

This cluster is the smallest, comprising 18% of the total sample (N=31). They were the most likely to be negative about the economic impact statements, and therefore they were labelled '*Economic Sceptics*'.

The '*Economic Sceptics*' were rated in-between for the social impact statements with the exception of the statement "tourism gives benefits to a small group of people in the area" where they were most likely to be positive (68% agreed).

In relation to the impacts of tourism on their region and on the Cretan economy, on employment and on the Greek government's income, the '*Economic Sceptics*' were the most negative. The '*Economic Sceptics*' accepted more frequently than those in the other clusters (82% agreed) that tourism creates more jobs for foreigners than for locals, and that most of the money earned from tourism ends up going out of the region (55% agreed and 32% were in the mid-range). Nevertheless, more than half supported the statement that "non-Cretan owned businesses are beneficial for the region's tourism industry" and 87% welcomed the development of tourism attractions by non-residents, giving the impression that the island is not exploited fully in tourism terms.

The '*Economic Sceptics*' were more likely to agree with the statement "tourism provides an incentive for the conservation of natural resources" (84% agreed), although for the other two environmental statements their responses were in-between the other two clusters.

Finally, although the '*Economic Sceptics*' were the most negative among the groups for the statements dealing with the overall benefits of tourism to the people of their region (55% agreed and 29% disagreed), they were between the two groups for the overall benefits of tourism to Crete as a whole (74% agreed) indicating they felt that their area had received less benefits from tourism expansion than the island as a whole, and therefore they called for outsiders to develop further the industry.

In summary, the findings of the clustering procedure suggest that in the case of Crete, community groups have different degrees of positivity towards various tourism impacts.

Specifically, the ‘Advocates’ are the most positive to all the impacts of tourism, the ‘SEC’ the most negative for the social and environmental impacts, whilst the ‘Economic Sceptics’ are the most negative about the economic impacts. Regarding the overall benefits of tourism, the ‘Advocates’ are again the most positive, although the opinions of the other two groups are mixed.

Matching the clusters to socio-demographics

In order to describe and analyse further the respondents’ attitudes the seven independent variables (education, dependence on tourism employment, city of residence, gender, length of residence, age and income) were tested for significant associations with the three clusters.

The clusters derived from the attitudinal statements were independent of socio-demographic characteristics apart from one, the educational level of respondents. In particular, as Table 6 indicates the first cluster (Advocates) had the highest share (47%) of medium-educated, the second cluster (SEC) the higher share of more highly educated (50%), and the third cluster (Economic Sceptics) the most less well educated respondents (48%). As a result it may be assumed that the medium-educated residents are more likely to be supportive of tourism development, the less-educated are more likely to be negative to the economic effects of tourism, and the highly-educated are more likely to be concerned about the environmental and social costs of tourism.

Table 6: Educational Level of Clusters

	‘Advocates’ %	‘SEC’ %	‘Economic Sceptics’ %
Low-educated	20	12	48
Medium-educated	47	38	39
Highly-educated	34	50	13

POLICY IMPLICATIONS

Although the results of this survey are encouraging for the Cretan tourism industry, because of the positive attitudes expressed by the local community to tourism development, attention should be given to the fact that a segment of Cretan residents, the ‘SEC’, expressed concern about the environmental and social impacts of tourism. Therefore, it is suggested that Cretan developers and planners should take into consideration the views of this potentially large segment of the Cretan urban population and direct increased efforts towards environmental protection and social welfare in future tourism strategies.

Resident acceptance of tourism development is considered important for the long-term success of tourism in a destination, since if tourists are greeted with hostility their number will decline. Therefore, the host community should be involved in the development and planning process. As Lankford and Howard (1994, p.135) state “local governments and tourism promoters should pay particular, emphasis to the finding that if people feel they have access to the planning/public review process and that their concerns are being considered, they will support tourism”. It is pointless for a community to expand tourism without the full support of its community.

In accordance to the findings of the present study (where residents employed in tourism were more positive to tourism) and the social exchange theory, when exchange of resources is high and balanced for the local community, tourism impacts are viewed positively by residents. However, in most communities benefits from tourism are often concentrated in the hands of a limited number of people who have the capital to invest in tourism at the expense of other segments of the community (e.g. lower class, uneducated and poor people). Therefore, Vivian (1992) finds many traditional societies repressive since they

often exclude large numbers of people from the development and planning process. As a result, to improve residents' perceptions toward tourism, Cretan authorities should attempt to distribute tourism benefits more equally within the local community, allowing a larger proportion of the local population to benefit from tourism expansion, rather than merely bearing the burden of its costs (Brohman 1996, p. 59). If benefits from tourism are to spread more equally within host communities, efforts should be made by the public sector to provide incentives to the local population for employment opportunities and establishment of tourism businesses.

Finally, regular monitoring of community attitudes could provide information for the needs, views and desires of host communities. A system of collecting longitudinal data should be established in order to monitor any changes in the perceptions of residents and their support of tourism development. If developers and planners are aware of the community's perceptions of tourism impacts, they will be able to take actions aimed at environmental conservation, increasing opportunities for public involvement and control of the tourism industry.

CONCLUSION

With few exceptions (e.g. Ap 1992; Canan and Hennesy, 1989; Fredline and Faulkner 2000; Madrigal, 1993; Martin, 1996), most studies examining residents' perceptions to tourism have been largely atheoretical. The most important theoretical contributions of this study are that its findings confirm the usefulness of social representations and social exchange theory in explaining residents' perceptions toward tourism.

First, social representations are assumed to determine individuals' attitudes, conceived as individual expressions of likes or dislikes, towards tourism. The results of the present study indicate that based on the social representations, and more specifically, by examining residents' perceptions of, and attitudes towards tourism development, segments of residents within host communities can be identified. However, the findings of the clustering procedure were not consistent and entirely unambiguous as compared to the findings of previous surveys having adopted similar statistical methods. In the case of Crete, the results of the cluster analysis were unclear, and quite difficult to interpret. With the exception of the 'Advocates' cluster, there is a difficulty with the other two clusters (the 'SEC' and the 'Economic Sceptics') because both clusters show different levels of support or hostility towards different impacts. The contribution of this study is the finding that within communities there are segments expressing different levels of support/concern for the various tourism impacts (economic, environmental and socio-cultural).

Second, the findings of this study with respect to the intrinsic dimension revealed interesting issues of concern. Specifically, the most significant single factor affecting residents' perceptions within the sample was education. In contrast to the majority of past research, this study found that education can determine residents' attitudes, and specifically highly educated respondents were more likely to express concern about the impacts of tourism. Following the principles of the social exchange theory, the current study concludes that those residents who benefit from tourism perceive on average greater social and economic advantages than those who do not receive any benefits (Milman and Pizam 1988; Pizam 1978), since residents employed in the tourism industry had more positive opinions toward tourism.

The findings of the research do not confirm the results of previous work by Davis, Allen, and Cosenza (1988), Evans (1993), Madrigal (1995), Fredline and Faulkner (2000), Weaver and Lawton (2001), and Williams and Lawson (2001) where anti-tourist segments were identified within host communities. In contrast, the findings follow those in the study by Ryan, Scotland, and Montgomery (1998, p. 127) in the rural community of Rangitikei,

where residents were found to support tourism. As Ryan, Scotland, and Montgomery (1998, p. 127) found in their study “even those scoring low relative to other groups within the Rangitikei are shown to be high scorers when compared to other places”. This interpretation applies equally to the case of Crete. However, Ryan, Scotland, and Montgomery (1998) attributed the strong support of Rangitikei’s residents in tourism to the ‘euphoria’ or ‘early involvement’ stage of its life cycle, although another study by Ryan and Montgomery (1994), in another rural community, found lower levels of support to tourism because of the destination’s maturity. The Cretan cities used in the sample are at the maturity stage of the resort cycle, but still residents expressed a quite strong support for tourism development without significant anti-tourist signs, although some concern was expressed. Besides, residents of the city of Agios Nikolaos with the most developed tourism industry among the cities surveyed (Tsartas et al. 1995) were more positive towards tourism development. Contrary to Doxey (1975) and Ryan, Scotland, and Montgomery (1998) this study found that stage of development is not a significant determinant of attitudes of urban residents on Crete. These findings lend credence to the study of Ap and Crompton (1993); Faulkner and Tideswell (1997); Mason and Cheyne (2000); Weaver and Lawton (2001) where it is suggested that the opposite of Doxey’s findings may be the case.

To conclude, although this research was subject to several limitations, mainly limited time, low budget, and refusal of a significant number of potential respondents to participate in the interview, it was possible to identify the perceptions of residents of four Cretan cities towards tourism development. However, limited past research of comparative studies has not made clear whether attitudes of residents of rural areas differ from the opinions of those living in urban areas. Therefore, it may be useful to extend further this research by conducting surveys on Cretan rural residents in an attempt to identify whether differences and similarities exist that may lead to the proposition that there are common characteristics between rural and urban communities worldwide, something that will make possible the suggestion of policy implications for the whole island.

REFERENCES

- Akis, S., N. Peristianis, and J. Warner (1996). “Residents’ Attitudes to Tourism Development: The Case of Cyprus”. *Tourism Management*, 17(7): 481-404.
- Allen, L. R., P. T Long, R. R. Perdue, and S. Kieselbach (1988). “The Impact of Tourism Development on Residents’ Perceptions of Community Life”. *Journal of Travel Research*, 27(1): 16-21.
- Allen, L.R., H. R. Hafer, P. T. Long, and R. R. Perdue (1993). “Rural Residents Attitudes toward Recreation and Tourism Development”. *Journal of Travel Research*, 31(4): 27-33.
- Anagnostopoulou, K., T., Arapis, I., Bouchy, and I. Micha (1996). *Tourism and the Structural Funds - The Case for Environmental Integration*. Athens: RSPB.
- Andereck, K.L, and C.A. Vogt (2000). “The Relationship Between Residents' Attitudes toward Tourism and Tourism Development Options”. *Journal of Travel Research*, 39(1): 27-36.
- Andriotis, K. (2000). *Local Community Perceptions of Tourism as a Development Tool: The Island of Crete*. PhD thesis. Bournemouth: Bournemouth University.
- Andriotis, K. (2001). “Tourism Planning and Development in Crete. Recent Tourism Policies and their Efficacy”. *Journal of Sustainable Tourism*, 9 (4): 298-316.
- Andriotis, K. (2002a). “Residents’ Satisfaction or Dissatisfaction with Public Sector Governance. The Cretan Case”, *Tourism and Hospitality Research: The Surrey Quarterly Review*. 4(1): 53-68.

- Andriotis, K. (2002b). "Scale of Hospitality Firms and Local Economic Development. Evidence from Crete". *Tourism Management*, 23(4): 333-341.
- Andriotis, K. (2002c). "Local Authorities in Crete and the Development of Tourism". *The Journal of Tourism Studies*. 13(2): 53-62.
- Ap, J. (1990). "Residents' Perceptions Research on the Social Impacts of Tourism". *Annals of Tourism Research*, 17(4): 610-616.
- Ap, J. (1992). "Residents' Perceptions on Tourism Impacts". *Annals of Tourism Research*, 19(4): 665-690.
- Ap, J., and J. L. Crompton (1993). "Residents' Strategies for Responding to Tourism Impacts". *Journal of Travel Research*, 32(1): 47-50.
- Assael, H. (1984). *Consumer Behaviour and Marketing Action*. Boston: Kent.
- Bachleitner, R., and A.H. Zins (1999). "Cultural Tourism in Rural Communities: The Residents' Perspective". *Journal of Business Research*, 44: 199-209.
- Belisle, F.J., and D.R. Hoy (1980). "The Perceived Impact of Tourism by Residents: A Case Study of Santa Marta, Columbia". *Annals of Tourism Research*, 7(1): 83-101.
- Besgulides, A., M.E. Lee, and P.J. McCormick (2002). "Residents' Perceptions of the Cultural Benefits of Tourism". *Annals of Tourism Research*, 29(2): 303-319.
- Blau, P.M. (1964). *Exchange and Power in Social Life*. New York: Wiley.
- Boonchote, T. (1994). *Changes Induced by Tourism Development in a Rural Community: A Case Study of the Golden Triangle, Thailand*. PhD thesis. University of Victoria.
- Boulding, K.E. (1956). *The Image: Knowledge and Life in Society*. Ann Arbor MI: Michingan Press.
- Brayley, R., and T. Var (1989). "Canadian Perceptions of Tourism's Influences on Economic and Social Conditions". *Annals of Tourism Research*, 16(4): 578-582.
- Brohman, J. (1996). "New Directions in tourism for Third World Development". *Annals of Tourism Research*. 23(1): 48-70.
- Brougham, J.E., and R.W. Butler (1981). "A Segmentation Analysis of Resident Attitudes to Social Impact of Tourism". *Annals of Tourism Research*, 8(4): 569-590.
- Brown, G., and R. Giles (1994). "Coping with Tourism: An Examination of Resident Responses to the Social Impact of Tourism". In *Tourism: The State of Art*, edited A.V. Seaton. Chichester: Wiley, pp. 755-764.
- Butler, R.W. (1975). "Tourism as an Agent of Social Change". In *Proceedings of the International Geographical Union's Working Group on the Geography of Tourism and Recreation*. Ontario: Trent University, pp. 85-90.
- Butler, R.W. (1980). "The Concept of Tourism Area Cycle of Evolution: Implications for Management of Resources". *Canadian Geographer*, 24(1): 5-12.
- Bystrzanowski, J. (1989). *Tourism as a Factor of Change. A Sociocultural Study*. Vienna: Vienna Center.
- Canan, P., and M. Hennessy (1989). "The Growth Machine, Tourism, and the Selling of Culture". *Sociological Perspectives*, 32(2): 227-243.
- Caneday, L., and J. Zeiger (1991). The Social, Economic, and Environmental Costs of Tourism to a Gaming Community as Perceived by its Residents. *Journal of Travel Research*, 30(2): 45-49.
- Chen, J.S. (2000). An Investigation of Urban tourism Residents' Loyalty of Tourism. *Journal of Travel and Tourism Research*, 24(1): 5-19.
- Cohen, E. (1972). "Toward a Sociology of International Tourism." *Social Research*. 39: 164-182.
- Davis, D., J. Allen, and R.M. Cosenza (1988). "Segmenting Local Residents by Their Attitudes, Interests, and Opinions toward Tourism". *Journal of Travel Research*, 28(2): 2-8.
- Diamantopoulos, A., and B.B. Schlegelmilch (1997). *Taking the Fear out of Data Analysis*. London: Dryden Press.

- Dogan, H.Z. (1989). Forms of Adjustment: Socio-cultural Impacts of Tourism. *Annals of Tourism Research*, 16(2): 216-236.
- Doxey, G. (1975). "A Causation Theory of Visitor-residents Irritants: Methodology and Research Inferences." In *Travel and Tourism Research Associations Sixth Annual Conference Proceedings*. San Diego: TTRA, pp. 195-198.
- Duffield, B.S., and J. Long (1981). "Tourism in the Highlands and Islands of Scotland: Rewards and Conflicts." *Annals of Tourism Research*, 8(3): 403-431.
- Eurostat (1994). *Portrait of the Islands*. Luxembourg: European Commission.
- Evans, T.R. (1993). "Residents' Perceptions of Tourism in Selected New Zealand Communities: A Segmentation Study." MPhil Thesis. Otago: Otago University.
- Faulkner, B., and C. Tideswell (1997). "A Framework for Monitoring Community Impacts of Tourism." *Journal of Sustainable Tourism*, 5(1): 3-27.
- Fredline, E., and B. Faulkner (2000). "Host Community Reactions. A Cluster Analysis". *Annals of Tourism Research*. 27(3): 763-784.
- Getz, D. (1986). "Tourism and Population Change: Long Term Impacts of Tourism on the Badenoch and Strathspey District of the Scottish Highlands". *Scottish Geographical Magazine*. 102(2): 113-126.
- Getz, D. (1994). "Residents' Attitudes towards Tourism: A Longitudinal Study in Spey Valley, Scotland". *Tourism Management*. 15(4): 247-258.
- Gilbert, D., and M. Clark (1997). "An Exploratory Examination of Urban Tourism Impact, With Reference to Residents Attitudes, in the Cities of Canterbury and Guildford". *Cities*, 14(6): 343-352.
- Gursoy, D., C. Jurowski, and M. Uysal, (2002). "Resident Attitudes. A Structural Modelling Approach". *Annals of Tourism Research*, 29(1): 79-105.
- Hair, J.F., R.E. Anderson, and R.L. Tatham (1987). *Multivariate Data Analysis*. 2nd ed. New York: Macmillan.
- Halfacree, K.H. (1995). "Talking About Rurality: Social Representations of the Rural as Expressed by Residents of Six English Parishes". *Rural Studies*. 11(1): 1-20.
- Haralambopoulos, N., and A. Pizam (1996). "Perceived Impacts of Tourism. The Case of Samos". *Annals of Tourism Research*, 23(3): 503-526.
- Harvey, M.J., J. Hunt, and C.C. Harris (1995). "Gender and Community Tourism Dependence Level". *Annals of Tourism Research*, 22(2): 349-366.
- HNTO (1998). *Statistics*. Athens: Hellenic National Tourism Organisation.
- Horwarth (1994). *The Greek Hotel Industry 1994*. Athens: Horwarth Consulting.
- Hsu, C.H.C. (1998). Impacts of Riverboat Gaming on Community Quality". *Journal of Hospitality and Tourism Research*, 22(4): 323-337.
- Hsu, C.H.C. (2000). "Residents' Support for Legalised Gaming and Perceived Impacts of Riverboat Casinos: Changes in Five Years". *Journal of Travel Research*, 38: 390-395.
- Husbands, W. (1989). "Social Status and Perceptions of Tourism in Zambia". *Annals of Tourism Research*, 16(2): 237-253.
- Johnson, J.D., D.J. Snepenger, and S. Akis (1994). "Residents Perceptions of Tourism Development". *Annals of Tourism Research*, 21(3): 629-642.
- Jurowski, C., M. Uysal, and D.R. Williams (1997). "A Theoretical Analysis of Host Community Resident Reactions to Tourism". *Journal of Travel Research*, 36(2): 3-11.
- Kim, J.M. (1986). *An Analysis of Korean Residents Attitudes toward the Impact of Tourism*. PhD Thesis. Washington DC: The George Washington University.
- Korca, P. (1998). "Resident Attitudes toward Tourism Impacts". *Annals of Tourism Research*, 23(3): 695-697.
- Kousis, M. (1984). *Tourism as an Agent of Social Change in a Rural Cretan Community*. PhD Thesis. Michingham: University of Michingham.
- Krech D and Crutchfield R. S. (1948). *Theory and Problems in Social Psychology*. New York: McGraw Hill.

- Lankford, S.V. (1991). *An Analysis of Resident Preferences, Attitudes and Opinions toward Tourism and Rural Regional Development in the Columbia River Gorge*. Ph.D. Thesis. Oregon: University of Oregon.
- Lankford, S.V. (1994). "Attitudes and Perceptions toward Tourism and Rural Regional Development". *Journal of Travel Research*, 32(3): 35-33.
- Lankford, S.V., and D.R. Howard (1994). "Developing a Tourism Impact Attitude Scale". *Annals of Tourism Research*, 21(1): 121-139.
- Liu, J., and T. Var (1986). "Resident Attitudes toward Tourism Impacts in Hawaii". *Annals of Tourism Research*, 13: 193-214.
- Liu, J., P.J. Sheldon, and T. Var (1987). "Resident Perceptions of the Environmental Impacts of Tourism". *Annals of Tourism Research*, 14(1): 17-37.
- Long, T. P., R. R. Perdue, and L. Allen (1990). "Rural Resident Tourism Perceptions and Attitudes by Community Level of Tourism". *Journal of Travel Research*, 28(3): 3-9.
- Madrigal, R. (1993). "A Tale of Tourism in Two Cities". *Annals of Tourism Research*, 22(2): 336-353.
- Madrigal, R. (1995). "Residents' Perceptions and the Role of Government". *Annals of Tourism Research*, 22(1): 86-102.
- Malhotra, N.K. (1996). *Marketing research: An applied analysis*. 2nd ed. London: Prentice.
- Martin, B.S. (1996). *The Efficacy of Growth Machine Theory in Explaining Resident Perceptions of Community Tourism Development*. Ph.D. Thesis. Clemson University.
- Mason, P., and J. Cheyne (2000). "Residents' Attitudes to Proposed Tourism Development". *Annals of Tourism Research*. 27(2): 391-411.
- McCool, S. F., and S. R. Martin (1994). "Community Attachment and Attitudes toward Tourism Development". *Journal of Travel Research*, 32(3): 29-34.
- Meier, K., and E. Kirchler (1998). "Social Representations of the Euro in Austria". *Journal of Economic Psychology*. 19: 755-774.
- Milman, A., and A. Pizam (1988). "Social Impacts of Tourism on Central Florida". *Annals of Tourism Research*, 15(2): 191-204.
- Mitchell, R.E., and D.G. Reid (2001). "Community Integration: Island Tourism in Peru". *Annals of Tourism Research*, 28(1): 113-139.
- Mok, C., B. Slater, and V. Cheung (1991). Residents Attitudes towards Tourism in Hong Kong". *International Journal of Hospitality Management*, 10(3): 289-293
- Moore, K.R., and W.A. Cunningham (1999). "Social Exchange Behaviour in Logistics Relationships: A Shipper Perspective". *International Journal of Physical Distribution and Logistics Management*, 29(2): 103-121.
- Moscovici, S. (1981). "On Social Representations". In *Social Cognition*, edited by Forgas, J.P. London: Academic Press, pp. 181-209.
- Moscovici, S. (1984). "The Phenomenon of Social Representations". In *Social Representations*, edited by Farr, R. and S. Moscovici. Cambridge: Cambridge University Press, pp. 3-69.
- Murphy, P. E. (1981). "Community Attitudes to Tourism: A Comparative Analysis". *Tourism Management*, 2(3): 189-195.
- Murphy, P.E. (1983). "Perceptions and Attitudes of Decision-making Groups in Tourism Centers". *Journal of Travel Research*, 21: 8-12.
- Papaioannou, S., N. Serntedakis, and G. Tsiolis (1998). "Socio-ecological Awareness and Practice". *Review of Social Research*, 96-97: 133-183.
- Pearce, D.G. (1989). *Tourist Development*. 2nd ed. New York: Longman.
- Pearce, J.A (1980). "Host Community Acceptance of Foreign Tourism: Strategic Considerations". *Annals of Tourism Research*, 7(2): 224-233.
- Pearce, P.L., G. Moscardo, and G.F. Ross (1996). *Tourism Community Relationships*. Oxford: Pergamon.

- Perdue, R. R., T. P. Long, and L. Allen (1990). "Resident Support for Tourism Development". *Annals of Tourism Research*, 17(4): 586-599.
- Perdue, R. R., T. P. Long, and Y.S. Kang (1995). "Resident Support for Gambling as a Tourism Development Strategy". *Journal of Travel Research*, 34(2): 3-11.
- Pizam, A. (1978). "Tourism's Impacts: The Social Costs to the Destination Community as Perceived by its Residents". *Journal of Travel Research*, 16(4): 8-12.
- Pizam, A., A. Milman, and B. King (1994). "The Perceptions of Tourism Employees and their Families toward Tourism". *Tourism Management*, 15: 53-61.
- Pizam, A., and J. Pokela (1985). "The Perceived Impacts of Casino Gambling on a Community". *Annals of Tourism Research*, 12(1): 147-165.
- Potter, J., and M. Wetherell (1987). *Discourse and Social Psychology*. Sage: London.
- Region of Crete (1995). *Tourism Profile of Crete*. Unpublished. Heraklio.
- Ritchie, J.R.B. (1988). "Consensus Policy Formulation in Tourism: Measuring Resident Views via Survey Research". *Tourism Management*, 9(3): 199-212.
- Ross, G. F. (1992). "Resident Perception of the Impact of Tourism on an Australian City". *Journal of Travel Research*, 3(3): 13-17.
- Rothman, R.A. (1978). "Residents and Transients: Community Reaction to Seasonal Visitors". *Journal of Travel Research*, 16(3): 8-13.
- Ryan, C., A. Scotland, and D. Montgomery (1998). "Resident Attitudes to Tourism Development - A Comparative Study between the Rangitikei, New Zealand and Bakewell, United Kingdom". *Progress in Tourism and Hospitality Research*, 4(2): 115-130.
- Ryan, C., and D. Montgomery (1994). "The Attitudes of Bakewell Residents to Tourism and Issues in Community Responsive Tourism". *Tourism Management*, 15(5): 358-369.
- Saveriades, A. (2000). "Establishing the Social Tourism Carrying Capacity for the Tourist Resorts of the East Coast of the Republic of Cyprus". *Tourism Management*. 21(2): 147-156.
- Sheldon, P., and T. Var (1984). "Residents Attitudes toward Tourism in North Wales". *Tourism Management*, 5(1): 40-47.
- Smith, V.L. (1978). *Hosts and Guests: The Anthropology of Tourism*. Oxford: Blackwell.
- Snaith, T., and A. Haley (1994). "Tourism's Impact on Host Lifestyle Realities". In *Tourism: The State of Art*, edited by Seaton, A.V.. Chichester: Wiley, pp. 826-835.
- Snaith, T., and A. Haley (1999). "Residents Opinions of Tourism Development in the Historic City of York, England". *Tourism Management*, 20(5): 595-603.
- Soutar, G.N., and P.B. McLeod (1993). Residents' Perceptions on Impact of the America's Cup". *Annals of Tourism Research*. 20(3): 571-582.
- SPSS (1997). *SPSS Base 7.5. Application Guide*. Chicago: SPSS Inc.
- Tabachnick, B.G., and L.S. Fidell (1989). *Using Multivariate Statistics*. 2nd ed. New York: HarperCollins.
- Thomason, P.S., J.L. Crompton, and B.D. Kamp (1979). "A Study of the Attitudes of Impacted Groups within the Host Community". *Journal of Travel Research*, 17(3): 2-6.
- Tomljenovic, R., and B. Faulkner (2000). Tourism and Older Residents in a Sunbelt Resort. *Annals of Tourism Research*, 27(1): 93-114.
- Tosun, C. (2002). "Host Perceptions of Impacts. A Comparative Tourism Study. *Annals of Tourism Research*, 29(1): 231-258.
- Tsartas, P., K., Theodoropoulos, R. Kalokardou-Krantonelli, E. Manologlou, K. Marountas, P. Pappas, and N. Fakiolas (1995). *Social Impacts of Tourism on the Prefectures of Corfu and Lassithi*. Athens: EKKE-EOT, [in Greek].
- Tyrrell, T., and I.A. Spaulding (1984). "A Survey of Attitudes toward Tourism Growth in Rhode Island". *Hospitality Education and Research Journal*. 8: 22-23.
- Um, S., and J.L. Crompton (1990). "Attitude Determinants in Tourism Destination Image". *Annals of Tourism Research*, 17(3): 432-448.

- Um, S., and J.L. Crompton (1987). "Measuring Resident's Attachment Levels in a Host Community". *Journal of Travel Research*, 26(1): 27-29.
- Vaughan, D.R., and J.R. Edwards (1999). "Experiential Perceptions of Two Winter Sun Destinations: The Algarve and Cyprus". *Journal of Vacation Marketing*, 5(4): 356-368.
- Vivian, J.M. (1992). "Foundations for Sustainable Development: Participation, Empowerment and Local Resource Management", In *Grassroots Environmental Action: Peoples' Participation in Sustainable Development*, edited by D. Ghai, and J.M. Vivian. London: Routledge, pp. 50-80.
- Weaver, B.D., and L.J. Lawton (2001). "Resident Perceptions in the Urban-Rural Fringe". *Annals of Tourism Research*, 28(2): 439-458.
- Williams, J., and Lawson, R. (2001). "Community Issues and the Resident Opinions of Tourism". *Annals of Tourism Research*, 28(2): 269-290.
- Yoon, Y., J.S. Chen, and D. Gursoy (1999). "An Investigation of the Relationship between Tourism Impacts and Host Communities' Characteristics". *Anatolia: An International Journal of Tourism and Hospitality Research*, 10(1): 29-44.